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**Descriptions of New Genera and Species of  
HYMENOPTERA from Mexico.**

BY P. CAMERON.

ICHNEUMONIDÆ.

ICHNEUMONINI.

**Hoplismenus ? leptocerus** sp. nov.

Scutellum roundly convex; the sides stoutly keeled to the middle. Median segment short, the apex straight, slightly oblique, the sides shortly toothed; the base depressed, the areola wider than long, transverse at the base, the apex slightly roundly curved inwardly; it is clearly separated from the petiolar area. The 2nd abdominal segment aciculated, the others smooth; the ovipositor largely projecting, as long as the last two segments united. Antennæ longer than the body, dilated towards the apex, the middle broadly ringed with white. Labrum projecting. Areolet 5-angled; disco-cubital nervure broken by a slight stump of a nervure; angled where it issues; the cubitus faint beyond the stigma. Tarsi long, the apices of the joints spinose. Ventral keel stout, extending to the base of the ovipositor. Apex of abdomen sharply pointed; there are 7 segments; the last is fully larger than the 6th.

The antennæ are longer than the body; the occiput is roundly emarginate; temples short, obliquely roundly narrowed; malar space distinct; abdominal petiole slender, not much dilated at the apex. The hind femora reach to the apex of the 4th abdominal segment. Radial cellule wide, not reaching much more than half way to the apex.

Yellow; a triangular spot covering the ocelli and prolonged down the front, becoming gradually narrowed, the greater part of the occiput, 3 broad lines on the mesonotum, the space at the sides of the scutellum, the base of the metanotum broadly, the posterior median area and the base of the meso- and metapleuræ, black. The back of the abdomen brownish, tinged with black, the apices of the 1st and 2nd segments broadly yellow; the others are more narrowly and obscurely yellow at their apices. Legs yellow, the hind femora and apical third of hind tibiæ brown; the other femora tinged with fulvous behind. Wings clear hyaline, the stigma testaceous, the nervures darker. Smooth and shining; the mesopleuræ in the centre and, to a less extent, the centre of the metanotum punctured. Areolet narrowed in front, but with the nervures clearly separated; the recurrent nervure received shortly beyond the middle. Length 5.5 mm.

*Hab.* Mexico.

As I cannot place this genus to my satisfaction I have given a generic and specific description of it. In Dr. Ashmead's table it fits best with *Hoplismenus*. It looks more like a Cryptid than an Ichneumonid. Probably it will form the type of a new genus.

## PHÆOGENINI.

**ERYTHROISCHNUS** gen. nov.

Scutellum roundly convex, clearly raised above the level of the mesonotum, the sides stoutly keeled to the top of the apical slope. Parapsidal furrows wide, deep on the basal half of the mesonotum. Median segment deeply depressed in the middle at the base: without a petiolar area; the areola large, wider than long, of equal width, the sides rounded at the base, the apex transverse; spiracles minute, longer than wide. Areolet 5 angled; the disco cubital nervure unbroken; the transverse median nervure in hind wings broken near the bottom. Metapleura with a complete keel below. Post-petiole broad. Gastracœli narrow, but distinct. Legs stout; the hind coxæ large and thicker than usual, roundly dilated at the base. Abdomen broad, not much longer than the thorax, bluntly rounded at the apex. Mandibles long, narrow, bidentate at apex. The body is red, the antennæ annulated with white.

The only genus of the Phæogenini, with which the present could be confounded, is *Ischnus*, which has, like it, a convex and elevated scutellum; the two may be separated:

Scutellum strongly keeled to near the apex; areola wider than long, of equal width; post-petiole wide, clearly separated; color rufous, antennæ annulated with white..... **Erythroischnus.**

Scutellum keeled at base only; areola longer than wide, not of equal width throughout; post-petiole not very wide, not clearly separated; color black.

**Ischnus.**

**Erythroischnus annulicornis** sp. nov.

Ferruginous; the flagellum of antennæ black, the 8 middle joints white; mandibles black; the upper part and apex of mesopleuræ, the basè, sides and apex of the median segment, almost the apical half of the hind femora and the apical fourth of the hind tibiæ black; wings hyaline, the nervures and stigma black. ♂. Length 6 mm.

Head and thorax closely, regularly and strongly punctured, the scutellum and median segment with the punctures as distinct, but more widely separated; the posterior median area transversely striated. Pleuræ obscurely obliquely striated. Basal segments of abdomen closely punctured; the sides of post-petiole depressed. Prosternum black. Apex of clypeus broadly rounded, as is also the labrum. Antennæ stout, shorter than the body.

*Hab.*—Mexico.

## MESSOTENINI.

**Mesostenus rufus** sp. nov.

Rufous; the head, prothorax and mesothorax, except on the pleuræ behind, black; the under side of antennal scape, face, clypeus, mandibles, the palpi, a

triangular mark on the front touching the eyes, prosternum, tegulae, tubercles, base of pronotum and scutellum whitish yellow; legs rufo-fulvous, the hind tarsi fuscous, the 2nd joint white. Flagellum of antennae dark fuscous. Wings hyaline, the stigma and nervures blackish. ♂. Length 4.5 mm.

Head, pro- and mesothorax smooth and shining; the metanotum between the keels irregularly longitudinally striated; the apical slope tinged with yellow, irregularly, obscurely striated. Mesopleurae closely striated on the top at the apex; it is yellow there, and the mesosternum is for the greater part yellow; its base marked with black. Areolet minute, badly defined, open behind, where the recurrent nervure is received. Head wider than the thorax, the temples roundly narrowed. Parapsidal furrows distinct at the base only. Metapleural keel distinct. Scutellum roundly convex, its sides not margined. The thorax is three times longer than wide; the metathorax moderately large, the basal keel distinct; the 2nd distinct in the middle only. Abdominal petiole long, slender, not much dilated at the apex. Transverse median nervure in hind wings angularly broken below the middle.

*Hab.*—Mexico.

This species does not look like a *Mesostenus*, but as it fits the characters of that genus, as given by Dr. Ashmead in his table (Bull. U. S. Nat. Mus., XXIII, 44) and no where else, I leave it in that genus.

***Mesostenoides fulvipes* sp. nov.**

Black, the face, clypeus, palpi, the eye orbits—the outer more broadly below—a line on the base and apex of the prothorax, a mark on the apex of the middle lobe of mesonotum, scutellum, postscutellum, the keels, the sides of the apical slopes of the metanotum, including the spines and extending on the metapleurae, tubercles, a large mark, narrowed behind, on the lower part of the mesopleurae, the greater part of the lower half of metapleurae—the line distinctly narrowed towards the apex—and brown bands on the apices of all the abdominal segments yellow. Legs rufo-fulvous, the tibiae and tarsi tinged with yellow, the 4 front coxae and trochanters yellow. Wings clear hyaline, the stigma and nervures black. ♀. Length 12 mm.; terebra 6 mm.

Face and clypeus sparsely punctured. Mandibles and sides of clypeus (including the foveae) black. Front at the lower ocellus striated; below it is a short keel. Mesonotum strongly but not closely punctured. Scutellum more sparsely punctured; the basal depression large, deep, with 2 keels in the centre. Base of metanotum smooth, slightly sparsely punctured; behind the keel strongly striated, except on the top of the apical slope; at the base of the keel, in the centre, are 2 short, stout curved keels; the spines stout, rounded and narrowed at the apex. Propleurae, except at the base, stoutly striated; mesopleurae less strongly striated above, the lower part punctured; the metapleurae closely, strongly obliquely striated. Abdomen smooth and shining. Areolet minute, narrowed behind; the recurrent nervure received at its apex; transverse median nervure received distinctly behind the transverse basal.

*Hab.*—Mexico.

**Cryptanura maculipes** sp. nov.

Black; the face, clypeus, mandibles, except at apex, a broad line round the inner and upper eye orbits, a short, broader one on the lower part of the outer; the malar space, palpi, base of pronotum, tegulæ, tubercles, the greater part of the scutellum, the lower half of the mesopleuræ, the mark broadest in front, a large mark, rounded behind, on the upper part of the base of the metapleuræ, a smaller oblique one in the middle and the tubercles, whitish yellow; the apices of the basal 3 abdominal segments yellow, tinged with rufous. Four front femora and tibiæ rufo-testaceous, the coxæ and trochanters pale yellow, the tarsi fuscous; the hind coxæ rufous, marked with black at the base, trochanters black, femora dark rufous, black above; the tibiæ black, with a small white band near the base; the tarsi black, the middle 3 joints white. Wings hyaline, the nervure and stigma black. Pro- and mesothorax smooth, the base of the mesopleuræ closely longitudinally striated. The metanotum behind the keel smooth; the middle transversely striated, the striæ curved; the apical slope longitudinally, irregularly striated, almost reticulated; the tubercles rounded, short, stout. Hind legs, as usual, much longer than the others; the coxæ 3 times longer than thick. Length 6 mm.

*Hab.*—Mexico.

## PHYGADEUONINI.

**Oxytænia rufo-lineata** sp. nov.

Black; the raised central part of the face, a large mark, roundly dilated in the middle, on the lower inner orbits, clypeus, mandibles, except at apex, malar space, palpi, tegulæ and scutellums yellow; the apices of the abdominal segments narrowly rufo-testaceous; the 4 front legs fulvo-testaceous, their coxæ and trochanters yellow; hind coxæ black; the trochanters and underside of the femora rufous; the tibiæ dark fuscous, the tarsi black; calcaria white. Wings hyaline, the stigma fuscous; the nervures black. ♂. Length fully 6 mm.

Antennæ as long as the body, slender, pilose; the basal joints of flagellum elongate. Clypeus roundly convex, separated from the face by a deep furrow, the sides bounded by a deep oblique one. Apex of clypeus broadly rounded, margined. Head sparsely covered with short silvery pubescence. Thorax shining; the mesonotum sparsely, the pleuræ closely and distinctly punctured. The areola is open at the base, longer than wide, dilated in the middle; the apex with 3 areæ, the central large, the lateral smaller and somewhat triangular. Abdomen smooth and shining, longer than the head and thorax united; the petiole long and slender. Areolet large, 5-angled, it being dilated in the middle behind, where the recurrent nervure is received. Parapsidal furrows deep on the basal slope. Scutellar depression large, deep, an obscure keel in the centre. Metanotal spiracles oval.

*Hab.*—Mexico.

I only know the ♂ of this species. It fits fairly well the description of *Oxytænia*. The temples are wide; the base of pronotum lined with yellow. Mesopleural furrow deep.

## TRYPHONINI.

**Scopesis flavolineatus** sp. nov.

Black; a mark, roundly dilated above, on the top of the inner eye orbits, oppo-

site the ocelli, a large mark on the face, extending from the top to near the bottom and incised in the centre above, a small mark on the sides below the middle, the clypeus, mandibles, except at the apex, malar space, the scutellums, and the 4 front legs lemon-yellow; the apical joint of the hind trochanters, the femora and tibiæ dark rufous; the apices of the joints of the middle tarsi blackish, the anterior so to a less extent. Flagellum of antennæ fuscous below. Wings hyaline, the stigma fuscous, the nervures darker colored. ♂. Length fully 5 mm.

Antennæ clearly longer than the body. Head shining, the front closely punctured, covered with a short pile. Mesonotum punctured in front. Metanotum closely punctured, pilose, the centre shining. Pleuræ closely and distinctly punctured. Abdomen shining, impunctate, pilose; the base of the 1st segment to near the middle, its sides and the apices of the other segments, narrowly, lemon-yellow; the yellow lines on the apical segments dilated in the middle. The disco-cubital nervure is roundly curved; the transverse cubital nervure is long, oblique; the recurrent nervure is received about two-thirds of its length beyond it. Hind tarsi stout, slightly longer than the tibiæ.

*Hab.*—Mexico.

**CERDA** gen. nov.

Disco-cubital nervure angled; broken by a stump of a nervure. Areolet oblique, the transverse cubital nervures uniting in front; the recurrent nervure received near the apex; the cubitus angled where it is received. Recurrent nervure broken by a short stump of a nervure above the middle. Transverse median nervure in hind wings broken below the middle. Median segment with a large areola, longer than broad, of equal width, transverse at the apex; there is a keel on the sides of the base of the metanotum and another below the spiracles; the apical slope bounded above and on the sides by a stout keel; spiracles minute. Abdomen sessile, the sides keeled throughout; the raised central part bounded by stout keels which extend to shortly beyond the middle. The segments are smooth, without depressions or furrows. The segments clearly separated; the apical bluntly rounded, curled downwards. Mandibular teeth of equal length. Clypeus separated from the face; its apex broadly rounded.

Comes near to *Protarchus*, which may be known from it by the metapleuræ having a tooth immediately above the hind coxæ, and by the hind wings having the transverse median nervure broken above, not below, the middle.

**Cerda fuscipennis** sp. nov.

Rufous, smooth, shining, the ocellar region and the mesopleuræ black. Median segment covered with longish white hair. Apex of mandibles black, their base yellowish. Legs densely covered with short, pale pubescence; the coxæ broadly

black below. Wings dark fuscous, a lighter cloud beyond the areolet, extending from the radius to the discoidal nervure, becoming narrowed gradually. Hind legs much longer than the anterior; their coxæ large, calcaria minute, stout, metatarsus as long as the following 2 joints united. Antennæ 29-jointed. Tegulæ large. ♂. Length 7 mm.

*Hab.*—Mexico.

#### OPHIONINÆ.

##### ***Limnerium longicauda* sp. nov.**

Black; the mandibles, palpi and tegulæ yellow; legs fulvous, the coxæ black, the trochanters, a broad band on the centre of the hind tibiæ and the base of the tarsi yellow; the apices of the tarsal joints darker colored; the 4 front tibiæ tinged with yellow; wings hyaline, the nervures fuscous, the areolet small, triangular, the pedicle longer than the lower branches, which are equal in length; the recurrent nervure is received shortly beyond the middle. ♀. Length 4; terebra nearly 3 mm.

Head and thorax smooth, impunctate; the metanotum aciculated; there is a minute petiolar area; the areola is horse-shoe shaped, open at the apex, the keels from it are continued round the sides of the metanotum; there are no lateral areæ. On the apical half of the mesopleuræ in the centre is a deep, slightly oblique, large fovea or depression.

*Hab.*—Mexico.

The long ovipositor, and there being only one area on the metanotum, distinguishes this species from the other Mexican ones.

##### ***Limnerium leptogaster* sp. nov.**

Black, the head and thorax densely covered with silvery pubescence; mandibles, palpi, antennal scape below, tegulæ, 4 front coxæ and posterior trochanters yellow; the rest of the 4 fore-legs yellowish fulvous; the hind coxæ black; the hind femora rufous, their tibiæ and tarsi black, the tibiæ tinged with testaceous in the middle; wings short, hyaline, the stigma and nervures blackish, areolet small, with a long pedicle; its basal nervure straight, its apical more curved and broken by a bulla below, the recurrent nervure received beyond the middle. ♂. Length 6 mm.

Abdomen long, slender, the basal two joints together as long as the thorax; the 2nd, 3rd and 4th segments marked with testaceous at the apex, especially on the sides. The upper part of the head and the thorax closely punctured. Areola long, obliquely narrowed at the base; there are 2 lateral areæ; the basal is wider than long, obliquely narrowed towards the apex; the apical is longer and is narrowed to a fine point from the inner side at the apex; the posterior median area is wide at the base, where it is not clearly separated from the areola; its apical bounding keels are not so strong as they are at the base. Metasternal keel stout.

*Hab.*—Mexico.

This species comes near to *L. centrale*; it may be known from it by the much longer abdomen, larger size, by the posterior median area of the metanotum not being of equal width, but having the basal part dilated towards its apex, the rest being also wider above.

The central part of the propleuræ is strongly striated and the upper part of the mesopleuræ less strongly above; in *centrale* these parts are coarsely aciculated, not distinctly striated.

***Limnerium mexicanum* sp. nov.**

Black; the mandibles, palpi, 4 anterior coxæ and trochanters, the hind trochanters, and the tegulæ pale yellow; the rest of the 4 front legs pale fulvous; the hind legs rufous, their coxæ, extreme base of tibiæ, a band beyond the white one near the base, their apical third and the tarsi black; the spurs white; wings hyaline, the nervures and stigma black; the apex of the 2nd abdominal segment and the apical segments at the sides, rufous. ♀. Length 4-5 mm.

Head closely punctured, the sides of the vertex obliquely striated. Labrum clearly separated, yellow. Mandibular teeth piceous. Thorax alutaceous, the pleuræ and metanotum thickly covered with white pubescence. Areola clearly defined, the base roundly narrowed, the sides straight, the apex transverse, the keel not very distinct; from its sides a keel runs obliquely to the apex; the spiracular region bordered by keels. Areolet with a long pedicle, oblique, receiving the recurrent nervure at the apex.

*Hab.*—Mexico.

***Limnerium aztecum* sp. nov.**

Black; the head and thorax densely covered with white pubescence; the mandibles, palpi, 4 front coxæ and trochanters, the apical joint of the posterior trochanters, the extreme base of the hind tibiæ, a broad band (broader than the apical or basal parts) in the centre, the basal third of the metatarsus and the calcaria whitish yellow; wings hyaline, the stigma fuscous, the nervures darker; the areolet small, triangular, shortly appendiculated. Head and thorax alutaceous, the pleuræ smoother and more shining. Areola indistinctly defined, small; the curved transverse furrow at its apex, stout in the middle, more indistinct laterally. Tegulæ yellow. Abdomen stout, especially posteriorly; not much longer than the head and thorax united. Ovipositor short. Length 4-5 mm.

*Hab.*—Mexico.

May be known from the other Central American species by the broad white band on the hind tibiæ.

***Limnerium centrale* sp. nov.**

Black; the head and thorax densely covered with silvery pubescence; the abdomen with shorter white pubescence; the underside of the antennal scape, mandibles (their apex piceous) and tegulæ yellow; legs: the 4 anterior rufo-fulvous, their coxæ and trochanters pale yellow; the hind legs rufous, the coxæ black, trochanters yellow; the apex of femora slightly, of the tibiæ more broadly and the tarsi black; wings hyaline, the stigma and nervures fuscous; the antennæ dark fuscous, the scape yellow below. ♂. Length 5.5 mm.

Metanotal areola not defined; in the centre are 2 keels running from the base to the apex; at their side, at the base, is an area which is obliquely narrowed on the outside from the apex to the base; beyond it are 2 areæ, the apical shorter, broader and somewhat triangular; the spiracular area defined. The apex of the



2nd abdominal segment testaceous, the others pale testaceous at the apex. Areolet with the petiole as long as the basal branch of the transverse cubital nervure; the recurrent nervure received in the middle.

*Hab.*—Mexico.

**Campoplex sumichrasti** sp. nov.

Black; the head and thorax densely covered with white pubescence; the greater part of the 1st and more or less of the sides of the other abdominal segments ferruginous; legs black, the 4 anterior tibiæ and tarsi, the fore femora, except behind, the apex of the middle, the middle of the posterior tibiæ behind, the 4 front calcaria, the mandibles broadly at the base and the palpi yellow; wings hyaline, the apical half of the radial cellule smoky, the stigma fuscous, the nervures black; areolet large, shortly appendiculated, angularly dilated below, the 1st transverse cubital nervure straight, the 2nd roundly curved, the recurrent nervure received in the middle. ♀. Length 15 mm.

Face and clypeus closely, finely longitudinally reticulated; the hair long and thick; the front and vertex coarsely alutaceous, the former with a furrow down the centre. Pro- and mesonotum closely rugosely punctured; their pleuræ more shining and with the punctures clearly separated. The scutellum more rugosely punctured than the mesonotum. Metanotum closely transversely, finely striated, the striæ roundly curved; the apical slope depressed in the middle; the sides near the stigma tuberculate; the segment is more densely haired than the rest of the thorax.

*Hab.*—Mexico.

Allied to *C. tepanecus* Cr.

PIMPLINA.

**Epiurus flavipes** sp. nov.

Black, the pro- and mesothorax with the scutellum, the lower part of the metapleuræ and the hind coxæ, rufous; the sides of the abdomen tinged with brown; legs clear pale yellow; basal half of flagellum fuscous below; palpi pale yellow; wings clear hyaline, the stigma fuscous, the nervures black. ♀. Length 7; terebra 4.5 mm.

Head and thorax smooth and shining; the propleuræ for the greater part black. The depression on the 1st abdominal segment is bordered by a distinct keel; the depressions on the 2nd to 5th segments are punctured; the sheaths of the ovipositor broad, densely covered with longish black hair. Areolet almost triangular; the recurrent nervure received at its apex. Transverse median nervure in hind wings broken shortly below the middle.

*Hab.*—Mexico.

**PAIPILA** gen. nov.

Wings without an areolet, the transverse cubital nervure very short, the radius and cubitus almost touching; the recurrent nervure is received considerably behind it; transverse median nervure interstitial; cubitus in hind wings unbroken. Stigma linear; the basal abscissa of radius curved, the apical straight. Both wings are cilia-

ted, the ciliæ much longer than usual. Face rostriform, narrowed below; the malar space is as long as the antennal scape; on its innerside is an indistinct furrow. Apex of clypeus broadly rounded. Occiput margined. Middle of metanotum depressed, the depression bordered by keels; the apical slope oblique, bordered by a keel, as is also the stigmal region and the metasternum. Stigma small, oval. Abdominal petiole slender, curved, hardly dilated at the apex; the stigma placed in the middle. The abdomen as in *Limnerium*, dilated towards the apex; the ovipositor short, hardly projecting. Legs long and slender, especially the hinder, which have their coxæ about 3 times longer than thick; the tibiæ as long as the femora and trochanters united; the calcaria minute, as long as the 4th tarsal joint, the metatarsus as long as the following 3 joints united; the apex of femora reaches near to the apex of the abdomen.

The systematic position of this genus is not very clear to me. It looks like a small *Limnerium*, but it cannot very well be placed in the Ophioninæ. It has the neuration of the front wings as in the Acœnitini, but it differs from that group in the form of the abdomen and in the long slender legs. It might be referred to the Labenini from the long hind coxæ, but otherwise there is not much resemblance. The form of the mouth separates it from the *Xorides*. The structure of the 1st abdominal segment is different from what it is in any of the tribes of the Pimplinæ, being much more similar to the abdomen of the Campoplegini. What ever its relationship may be it should be readily known by the rostriform head, furrowed malar space, depressed middle of the median segment, long slender petiole, with the stigma in its middle, short, almost obsolete transverse cubital nervure, long hind coxæ, the middle coxæ being also elongate, and unbroken transverse cubital nervure in hind wings.

***Paipila longipes* sp. nov.**

Black; the 4 front legs testaceous, the middle femora and tibiæ infuscated; the clypeus at the apex, mandibles and palpi rufo-testaceous; tegulæ yellow; middle and base of abdomen testaceous, the apex of the basal 3 segments of the abdomen narrowly obscure yellow; wings hyaline, the nervures black, the stigma fuscous. ♀. Length nearly 5 mm.

Antennæ as long as the abdomen, which is more than double the length of the thorax; densely covered with a short pile. Head and thorax closely minutely punctured; there is a raised, more shining line down the face. Abdomen smooth and shining; the 1st segment has a furrow in the centre above; it is as long as the 2nd and 3rd united. Hind coxæ closely distinctly punctured.

*Hab.*—Mexico.

## BRACONIDÆ.

## SIGALPHINÆ.

**RHYSSOSIGALPHUS** gen. nov.

♀.—Abdomen with one visible segment; its apex deeply roundly incised, the sides of the incision forming longish, stout teeth; the back coarsely, rugosely punctured. Radial cellule short, acute at the apex. Transverse median nervure received clearly beyond the transverse basal; it does not extend to the apex of the wing, so that the pobrachial and the podiscoidal cellules are not separated, the anal nervure is only indicated at the base, it is interstitial; the podiscoidal and the anal cellules are not separated; there is a distinct axillary transverse nervure in the axillary cellule. In the hind wing the radius is almost obsolete; the cubitus extends to the middle; there is a large pobrachial cellule, wide at the apex, where it is closed by a stout, slightly oblique nervure, it is bounded below by a nervure which curves roundly upwards and reaches to the transverse nervure; the radius and cubitus are indistinct; the other nervures stout. Malar space large. Mesonotum trilobate; apex of clypeus slightly waved. Antennæ placed high up on the face. Metanotum areolated, its apex with a steep slope bordered above. Abdomen sessile, margined at the base.

Comes nearest to *Urosigalphus* Ashm., which may be known from it by having the "apex of abdomen *without* or with only a slight emargination," not deeply emarginated and stoutly spined, as in the present genus. The ovipositor issues from the middle of the abdomen; the hypopygium is depressed in the middle, the apex bifoveate; the sides raised, the raised part continued onto the teeth.

**Rhyssosigalphus rugosus** sp. nov.

Black, the fore legs and the apex of middle femora and their tibiæ rufotestaceous; wings fusco-hyaline, the nervures and stigma black. ♀. Length 4 mm.

Head rugosely, but not closely punctured, thickly covered with glistening white hair; the clypeus, a line in the centre of the face and the vertex behind the ocelli smooth. Thorax coarsely, irregularly rugosely punctured and reticulated; the greater part of the mesopleuræ smooth and shining. Middle lobe of mesonotum clearly separated, bounded by a keel, not reaching to the scutellar depression, which is large, smooth and deep. Metanotum depressed at the base, its centre with a deep, square area, bounded by stout keels; the lateral region is divided into two by a transverse keel; the parts between irregularly depressed; the apical slope is irregularly reticulated and margined above by a stout keel; the base and apex of the mesopleuræ and the base of metapleuræ with a row of deep round foveæ; the mesosternum closely reticulated. Abdomen closely,

stoutly punctured; on the back the punctures run into reticulations and they become weaker towards the apex; the apex in the middle transverse, the sides forming stout teeth, which are twice longer than wide.

*Hab.*—Mexico.

***Urogaster albinervis* sp. nov.**

Black, the apex of the 4 front femora broadly, their tibiæ and tarsi, the base of the hind tibiæ and the apical 4 joints of the hind tarsi testaceous; the wings very clear hyaline, iridescent; the costa and borders of the stigma testaceous, the other nervures milk-white, almost transparent. Head and thorax opaque, the mesonotum closely, minutely punctured, the scutellum more shining, almost impunctate; the basal depression with some striæ; its sides bordered by a distinct transversely striated furrow; the apex smooth and with a distinct fovea; the part outside the furrow is smooth and shining and bordered at the base by striated furrow. The postscutellum is comparatively large, striated, depressed, bordered by a stout keel which is rounded behind. In the centre of the metanotum is a large area which is angularly dilated in the middle and is irregularly rugose; the sides are keeled; the lateral parts stoutly aciculated; the centre of the middle area is aciculated. Tegulæ dark testaceous. The body and legs are covered with a minute pale pile. Length 2 mm.

*Hab.*—Mexico.

***Chelonus clavinervis* sp. nov.**

Black; the apical three-fourths of the fore femora, the apex of the 4 posterior and the tibiæ and tarsi rufo-testaceous; the base of the abdomen with a large mark, about 3 times longer than wide on the sides, with a smaller mark, half its width, attached to its outer side, of a whitish testaceous color; wings hyaline, the apex smoky, the nervures and stigma black. ♀. Length 4 mm.

Clypeus margined laterally, smooth and shining; its basal depression with some stout keels. In the centre of the base of the metanotum are 2 twisted keels, with a broken one, stout at the base, in the centre; on the sides are some irregular keels; the apical slope is stoutly, irregularly longitudinally striated. Propleuræ coarsely rugose; the mesopleuræ strongly punctured, the punctures running into reticulations; the metapleuræ coarsely closely rugose-reticulated. Abdomen closely punctured, reticulated, the base much more strongly than the rest and irregularly striated. The base of the radius is thickened; the apex of the transverse basal nervure is clavate, black, the rest of it and the basal 2 nervures are testaceous, the other nervures black.

*Hab.*—Mexico.

***Euphoriella testaceipes* sp. nov.**

Dark rufous, the flagellum of antennæ black, the legs yellowish testaceous; wings hyaline, the nervures and stigma dark testaceous. ♀. Length 2 mm.

Antennæ at least 15-jointed, longer than the body, almost bare, the joints greatly lengthened. Smooth, shining, almost bare; the parapsidal furrows deep, distinct on the basal half of mesonotum. A distinct transverse furrow at the base of the scutellum. Ovipositor projecting, about one-third of the length of the abdomen. Pterostigma large, elongate. Radius obsolete. Basal nervure

received at the base of parastigma; the transverse median shortly before the middle of the cellule; cubitus obsolete beyond the 1st transverse cubital nervure. The only complete cellules are the 1st cubital and the 1st discoidal; the transverse median nervure is thickened and only present in front, the submedian and the 2nd discoidal cellules being thus not completely separated. Apex of wings ciliated.

*Hab.*—Mexico.

## OXYURA.

### ***Zelotypa xanthopus* sp. nov.**

Black, smooth and shining, the head, thorax and petiole covered with glistering white hair; the mandibles and basal two joints of antennæ rufous; the legs rufo-testaceous, tinged with yellow; wings hyaline, the nervures dark testaceous. ♀. Length 2.5 mm.

Flagellum of antennæ covered with a white pile; its first joint fully twice the length of the pedicle, the 1st to 9th distinctly longer than broad, the others not much longer than broad. Angles of collar rounded. Metanotum stoutly keeled in the middle; the sides bordered by thinner keels. Petiole about 3 times longer than wide, stoutly keeled down the centre and with 2 thinner keels on either side. Marginal vein not half the length of marginal cellule and twice the length of the 1st abscissa of radius. Tegulæ rufo-testaceous. Abdomen not much longer than the head and thorax united, sharply pointed at the apex and to a less extent at the base of the 2nd segment.

*Hab.*—Mexico.

### ***Epyris varidens* sp. nov.**

Black, densely covered with white pubescence, wings hyaline, the nervures whitish testaceous. ♂. Length 7-8 mm.

Antennæ as long as the thorax and abdomen united, the joints of flagellum clearly separated, densely covered with white pubescence. Head strongly rugosely punctured; the punctures more widely separated and smaller on the vertex than on the front, where they run into each other. The keel on the clypeus is dilated and opaque at the apex, which is slightly roundly incised. Mandibles large, curved; their basal tooth is larger than the others, red, triangular, and does not point, like the others, towards the apex; the middle pair are the shortest and bluntly rounded; the apical is long, stout and becomes gradually narrowed to the apex. The mandibles are strongly punctured, the punctures elongate and clearly separated; the outer edge is fringed with long white hair. Pronotum strongly punctured, the punctures round and clearly separated; the mesonotum is more sparsely and less strongly punctured, and the scutellum still more weakly. Metanotum with a stout keel down the middle; this is weaker at the base where two keels run into it from the sides; the area thus formed is stoutly striated, the 2 inner keels being stouter and widely separated from the thin central keel; the apical portion of this is closely bordered by striæ, which become gradually narrowed; the sides above and the apical slope above are irregularly rugose and thickly covered with white hair. Central depression of propleuræ irregularly striated; the raised lower part with a deep oblique furrow beyond the middle. On the basal half of the mesopleuræ is an irregular longitudinal furrow, wide, shallow and striated at the base, narrowed beyond the middle, its apex deep,

ovoid, irregularly rugose in the middle; below its middle is a deep fovea, rounded above, transverse below. Metapleuræ finely, closely striated.

*Hab.*—Mexico.

**Epyris mexicanus** sp. nov.

Black; the antennæ, except the apical joints which are infuscated, mandibles except the teeth, which are black, and the legs rufo-testaceous; the coxæ, the fore femora broadly in the centre behind and the greater part of the 4 posterior black; the sides and apex of the 1st abdominal segment and the apices of the others testaceous. Wings hyaline, the nervures testaceous. ♂. Length 5 mm.

Head strongly but not closely punctured. Clypeus broadly rounded, bluntly keeled in the middle. Flagellum of antennæ densely covered with white pubescence. Pro- and mesonotum sparsely, distinctly punctured, the metanotum shining, impunctate, except on the apical slope, which is aciculated. The centre of the propleuræ closely, strongly striated. There is an irregular striated depression on the base of the mesopleuræ, beyond this is a roundly curved, horn-shaped depression, dilated at the apex. Metapleuræ aciculated. Sternum thickly covered with long white hair. Tegulæ testaceous.

*Hab.*—Mexico.

ACULEATA.

**Rhopalum spinigerus** sp. nov.

Black; antennal scape, 4 front legs, a large mark, broadly rounded below the tubercles, hind trochanters and a line on the posterior tibiæ behind, mandibles, except at the apex and palpi, bright lemon-yellow; flagellum of antennæ fuscous below; wings hyaline, the nervures and stigma black. ♂. Length nearly 4 mm.

Lower part of front, face and clypeus thickly covered with silvery pubescence. Eyes large, coarsely faceted, distinctly converging below. Ocelli in a triangle, the hinder separated from each other by about the same distance they are from the eyes. Temples above as long as the antennal scape. Metanotal area with a large, deep V-shaped depression which reaches to its middle; there is a deeper, larger depression on the apical slope; there are some short keels on the base. Pleuræ smooth, thickly covered with white pubescence. Petiole in length twice the width at the apex, becoming gradually wider towards it; it is clearly longer than the 2nd segment. Tegulæ piceous. Recurrent nervure received almost in the middle of the cellule; apical abscissa of radius straight, oblique. Fore femora narrowed at the base and to a less extent at the apex; on the under side, at the base of the apical third, is a sharp tooth or spine; the tibiæ narrowed at the base, from where it becomes gradually thicker to the apex; the basal joint of the tarsi dilated, rounded above, straight below. Middle legs normal. The hind tibiæ become gradually thicker, but not very much, towards the apex. Outer spur of hind tibiæ broad, knife-shaped; metatarsus stout, as long as the other joints united.

*Hab.*—Mexico.

**Rhopalum angulicolle** sp. nov.

Black; antennal scape below, mandibles, except at the apex, palpi, tubercles, the greater part of the fore tibiæ and tarsi and the middle tarsi, the middle tibiæ

behind and the base of the hinder, yellow; wings hyaline, the nervures and stigma black; the apices of the abdominal segments piceous. ♀. Length 5 mm.

Head large, cubital, longer than broad, the temples very little narrowed, as long as the eyes as seen from above; the occiput roundly incised, the outer edges bluntly rounded. Ocelli in a triangle, separated from the eyes by a greater distance than they are from each other; there is a furrow between them, which, behind, extends beyond the hinder. The lower part of the outer orbits is obliquely narrowed. Pronotum large, flat above, not much narrowed towards the base, the basal angles slightly projecting, rounded. There are 2 fine furrows on the base of the mesonotum in the centre. Scutellar depression deep, wider and deeper at the sides; its apex bordered by a distinct, curved furrow. Metanotum aciculated, its base with a striated depression; the furrow bordering the area is also striated; the apical furrow deep, narrow above and below. Abdominal petiole long and slender, not much dilated at the apex, fully as long as the following two segments united. Hind tibiæ narrowed at the base, greatly dilated towards the apex, which is rounded; metatarsus as long as the following 3 joints united. Recurrent nervure received shortly beyond the middle; the apical abscissa of radius long, oblique.

*Hab.*—Mexico.

### **HOLCORHOPALUM** gen. nov.

Mesosternum bordered by a wide, deep, oblique furrow. Base of metanotum with 3 large areæ, the central smaller than the lateral; the top of apical slope bordered by a keel. Occiput bordered by a stout keel placed far below the top. Mandibles long, curved, sharply pointed. Parapsidal furrows distinct. Radial cellule short, not reaching half way to the apex; transverse median nervure received far behind the transverse basal.

Temples short, obliquely narrowed. Ocelli in a triangle. Scutellar depression large, deep, a stout keel in its centre and an oblique one on either side. Abdominal petiole long, nodose at the apex. Legs densely covered with long hair; claws long, slender, simple. Mesopleuræ bordered near the base by a stout, obliquely curved keel. Third and fourth joints of antennæ about equal in length.

This genus has the form and long abdominal petiole of *Rhopalum*, but is readily distinguished from it by the conspicuous mesopleural furrow, by the areolated base of mesonotum and by the transverse median nervure being widely distant from the transverse basal.

### **Holcorhopalum foveatum** sp. nov.

Black, shining; the legs pallid yellow, the hind femora black, the hind tibiæ, except at the base, and their tarsi dark fuscous; wings hyaline, the nervures blackish; apex of 1st abdominal segment testaceous, the last and the apex of penultimate rufous. Antennal scape and underside of flagellum rufo-testaceous. ♀. Length 4 mm.

Head and thorax sparsely covered with longish blackish hair and more sparsely with longish silvery pubescence; the clypeus more densely than the rest. Its apex is testaceous and is broadly rounded. Basal two-thirds of mandibles testaceous, the apical black. The basal half of the pronotum is depressed, the apical being clearly raised above it; it is bordered all round with testaceous. Tubercles large, flat, testaceous, the sides and apex bordered with silvery pubescence. Mesopleuræ roundly bulging out; a large, round fovea in the centre. Post-scutellum bordered by keels, the part on either side densely covered with silvery pubescence. Apical slope of metanotum closely, transversely striated; there is a large curved fovea on the upper part of the metapleuræ. The mesopleural furrow bears in the middle some stout striæ. Abdominal petiole as long as the 2nd and the half of the 3rd segment.

*Hab.*—Mexico.

***Crabro mexicanus* sp. nov.**

Black; the mandibles broadly at the base, the greater part of the antennal scape, the lateral third of the apex of the pronotum, the scutellar keels, a curved line on either side of the apex of post-scutellum, a line on the propleuræ, united to the line on the pronotum, joined to the yellow tubercles and continued down the apex of the propleuræ, yellow; the fore femora (except a black band behind) tibiæ and tarsi, a line on the underside of the middle femora at the apex, the 4 hind knees, the basal half of the posterior tibiæ behind and the greater part of the hind tarsi, yellow. Flagellum of antennæ brownish beneath. Wings hyaline, the nervures black. ♂. Length 5 mm.

Face and clypeus densely covered with silvery pubescence; the middle of clypeus bearing 4 short, obtuse teeth, the outer sharper and narrower than the inner. Vertex and front above shagreened; the frontal depression bordered above by a keel; a distinct, deep furrow runs to it from the ocelli. The upper part of the eyes is bordered by a furrow, which is obscurely crenulated on the outer side. Occiput acutely margined. Mesonotum closely, minutely punctured; its centre at the base is depressed and there is a shallow furrow on either side of the depression; on the outer side of these, at the extreme base, is a row of 4 or 5 foveæ. Hinder edge of scutellum obscurely striated; a stout keel in the centre of the basal depression. Metanotal area bounded by a keel, which is bordered by a furrow on the inner side; in the centre are 2 keels, which converge slightly towards the apex; on either side of these, at the base, is a curved keel, forming a semi-circular area; the apical slope has the central depression obscurely transversely striated. Mesopleuræ densely covered with silvery pubescence; on the top, at the base, are 4 stout keels; the furrow bordering these bears some stout keels and reaches close to the sternum; the apical furrow is crenulated. Metapleuræ with a line of foveæ near the base and another bordering the apex. First abdominal segment broad at the base, becoming gradually wider towards the apex; it is longer than the 2nd segment. Hind tibiæ with 4 obtuse teeth, the central pair the larger. Apical abscissa of radius straight, not oblique; recurrent nervure received in the middle of the cellule.

*Hab.*—Mexico.

Comes near to *C. yucatanensis* and *C. montezuma*. The ocelli are in a curve; the occiput roundly incised.



**Crabro ezræ** sp. nov.

Black; the antennal scape below, the greater part of the 4 front trochanters, apex of fore femora, the tarsi, the 4 front tibiæ and the base of the posterior tibiæ, yellow. Mandibles yellow, rufous at the apex. Wings hyaline, the nervures black; the recurrent nervure received shortly, but distinctly, before the middle of the cellule; the apical abscissa of radius oblique, rounded below. ♀. Length 5 mm.

Face and clypeus densely covered with silvery pubescence; clypeus keeled in the centre, its apex rounded. Eyes very large, coarsely faceted; distinctly converging below. Ocelli large; the anterior separated from the posterior by a slightly greater distance than these from each other. Temples large. Occiput transverse. Pro- and mesothorax alutaceous; the median segment shining; its area large; the bounding furrows curved, obscurely striated; the central furrow is obscurely crenulated. Pleuræ smooth and shining. Tegulæ piceous. Petiole broad at the base, becoming gradually wider towards the apex.

*Hab.*—Mexico.

In size and coloration this species comes close to *C. montezuma*, but may readily be separated from it by the ocelli not being in a triangle but in a curve, and the metanotal area not longitudinally striated.

**Entomognathus mexicanus** sp. nov.

Black, smooth, shining, covered with silvery pubescence; the outer edge of the pronotum, the 4 front tibiæ, except behind, and the tarsi, except at the apex, yellow; wings hyaline, the nervures black. Face and clypeus densely covered with silvery pubescence. Metanotal area roundly raised, clearly separated, strongly aciculated, with 4, not very distinct, longitudinal keels; the keels bounding it are continued down the centre, forming an area, which is narrowed gradually towards the apex; the rest is coarsely aciculated and is bordered laterally. The oblique furrow near the base of the mesopleuræ is wide, deep and bears stout keels. Radial cellule short, not quite reaching to the middle; the apical abscissa slightly oblique, more than half the length of the transverse cubital. Abdomen smooth, shining; the apices of the 3rd and 4th segments roundly incised; the penultimate segment closely, coarsely punctured; the last rufous; the dorsum with the sides stoutly raised all around, the apex rounded; the edges of the segments piceous. Clypeus roundly convex; its apex not quite transverse, the outer edges slightly dilated; beyond it are two indistinct, rounded teeth or tubercles. Hinder ocelli separated from each other by a slightly greater distance than they are from the eyes and by a distinctly greater distance than they are from the anterior. The pubescence on the eyes is white. Length 3 mm.

*Hab.*—Mexico.

*Entomognathus* appears to be rare in the nearctic and neotropical regions.

**PLESIOMASARIS** gen. nov.

♂.—Fore wings with 3 cubital cellules, the 2nd and 3rd receiving each a recurrent nervure, the radial cellule appendiculate. Head large, transverse behind; temples distinct; malar space obso-

lete. Apex of clypeus bidentate. Antennæ stout, clavate, as long as the thorax. Abdomen stout, almost sessile, becoming gradually wider to the apex, as long as the 2nd segment. Antennal scape stout, short, about 3 times longer than wide, not longer than the 3rd joint.

The scutellum is large, flat, rounded behind; metanotum short, with a straight oblique slope; the last abdominal segment bluntly rounded; the ventral surface flat. Legs moderately stout, the tarsi longer than the tibiæ. Eyes large, slightly converging below. Head wider than the thorax. Tegulæ large.

May be known from *Paramasaris* by the sessile abdomen; from *Euparagia* by the antennæ in ♂ being clavate and the scape short, not very long. The body largely marked with yellow as in *Odynerus*, to which it has a great resemblance.

***Plesiomasaris maculiceps* sp. nov.**

Black; a large oval mark, longer than broad, in the centre of the clypeus above, a small mark on the vertex touching the end of the eyes, a line on the upper edge of the pronotum, large, roundly dilated at the base, the greater part of the tegulæ, a spot below the tubercles, a large mark on the apical half of the scutellum, its sides at the base largely, its centre slightly dilated, a line on the apex of the 1st abdominal segment, squarely dilated at the sides, a similar line on the 2nd to 5th roundly dilated laterally, and a line in the centre of the 6th, yellow. Legs black, the knees, the greater part of the 4 hinder tibiæ and the basal joint of the tarsi, yellow. Wings hyaline, the nervures black; the 1st recurrent nervure received shortly beyond, the 2nd shortly in front of the middle of the cellule; 1st transverse cubital nervure oblique, the 3rd broadly rounded. The whole body and legs densely covered with silvery pubescence. Head and thorax alutaceous, the pleuræ closely punctured; the metathorax less closely punctured and with a curved furrow behind the middle on the lower two-thirds; the upper part at the base bears some stout irregular striæ. Clypeal teeth long, stout, narrowed towards the apex, which is smooth, the rest being punctured. Base of mandibles punctured, the middle rufous; both the teeth are bluntly rounded. The outer eye orbits are clearly margined. Length 8 mm.

*Hab.*—Mexico.